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Nakayama et al.

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[54] **VEHICULAR TRAVELING DIRECTION MEASURING SYSTEM**

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[57] **ABSTRACT**

A system measures a traveling direction of a vehicle based on a direction toward a coordinate position defined by outputs of a geomagnetic sensor from a first coordinate position of a center of a corresponding output circle. The system utilizes a preliminary coordinate position as a preliminarily corrected value of the first coordinate position, a first value indicative of accuracy of the preliminary coordinate position and a second value which is variable depending on a variation in a magnetization level on a vehicle body. The system derives a finally corrected value of the first coordinate position based on the preliminary coordinate position and a latest value of the finally corrected value which has been derived in a prior execution of the system, by changing a rate which determines a point of the current finally corrected value between the latest finally corrected value and the preliminary coordinate position.

22 Claims, 16 Drawing Sheets